THE Index is arranged according to subjects on the plan of the *Index du Répertoire Bibliographique* (published by MM. Gauthier-Villars, pp. 112, 2nd edition, 1908; about 2/-).

# INDEX

TO THE

# MATHEMATICAL GAZETTE

No. 102, JAN. 1913—No. 114, DECEMBER 1914.

COMPILED BY MRS. W. J. GREENSTREET.

1. Local Branches.
2. Articles, etc.
3. Mathematical Notes.
4. Reviews and Short Notices of Books.
5. Queries and Answers.
6. Correspondence.
7. Errata and Addenda.

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## EXPLANATORY REMARKS.

IT is not possible to give in full the subjects under the thousand or so sub-divisions which appear in the *Index*; but for the sake of those who do not possess the *Index* we give general titles with the principal letters. This will amply suffice for the majority of our readers.

### MATHEMATICAL ANALYSIS.

**A.** Elementary Algebra; theory of algebraic and transcendental equations; Galois groups; rational fractions; interpolation.

**B.** Determinants; linear substitutions; elimination; algebraical theory of forms; invariants and covariants; quaternions; functional determinants; differential forms; equipollences and complex quantities; universal algebra.

**C.** Principles of the differential and integral calculus; analytical applications; quadratures; multiple integrals; functional determinants; differential forms; differential operators.

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**D.** General theory of functions and its application to algebraical and circular functions; infinite series and expansions, especially infinite products and continued fractions considered from the algebraical point of view; Bernoulli's numbers; spherical and analogous functions.

**E.** Definite integrals, and Eulerian integrals in particular.

**F.** Elliptic functions with their applications.

**G.** Hyperelliptic, Abelian, and Fuchsian functions.

**H.** Differential equations, and equations with partial differences; functional equations; equations with finite differences; recurrent series.

**I.** Arithmetic and theory of numbers; indeterminate analysis; arithmetical theory of forms and of continued fractions; the division of the circle; complex, ideal, and transcendental numbers.

**J.** Combinatory analysis; probabilities; calculus of variations; general theory of groups of transformations (omitting Galois groups (**A**), groups of linear substitutions (**B**), and groups of geometrical transformations (**P**); Cantor's theory of aggregates.

**K.** Geometry and Trigonometry; projective and descriptive geometry; perspective.

**L.** Conics, quadrics, etc., of the second degree.

**M.** Algebraic and transcendental curves, surfaces, etc.

**N.** Complexes and congruences; connexes; systems of curves, surfaces, etc.; enumerative geometry.

**O.** Infinitesimal and kinematic geometry; geometrical applications of the differential and integral calculus to the theory of curves, surfaces, etc.; quadrature and rectification; curvature; asymptotes; geodesics, lines of curvature; areas and volumes; minima surfaces; orthogonal systems.

**P.** Geometrical transformations; homography; homology and affinity; correlation and reciprocal polars; birational and other transformations.

**Q.** Geometries; generalities on geometry of $n$ dimensions; non-Euclidean geometry; analysis situs; the geometry of situation.

APPLIED MATHEMATICS.

**R.** General Mechanics; kinematics; statics, comprising centres of gravity and moments of inertia; dynamics; mechanics of solids; friction; attraction of ellipsoids.

**S.** Mechanics of fluids; hydrostatics; hydrodynamics; thermodynamics.

**T.** Mathematical physics; elasticity; resistance of materials; capillarity; light; heat; electricity.

**U.** Astronomy; celestial mechanics; geodesy.

**V.** The philosophy and history of mathematics; teaching of mathematics; biographies of mathematicians.

**X.** Processes of calculation; nomography; graphic calculation; planimeters; instruments of various kinds; games and recreations.

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